

**GREATER YELLOWSTONE COORDINATING COMMITTEE**  
**2008 PROJECT STATUS REPORT**  
**Prepared January 29, 2009**

**Project Title:** Monitoring Whitebark Pine in the Greater Yellowstone Ecosystem

**Park/Unit:** Yellowstone and Grand Teton National Parks and the Beaverhead-Deerlodge, Bridger-Teton, Caribou-Targhee, Custer, Gallatin and Shoshone National Forests

**Funding Sources:** Greater Yellowstone Coordinator Committee and the Greater Yellowstone Network Inventory and Monitoring Program

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**Project Description:**

The Whitebark Pine monitoring project is an interagency effort to monitor the status of whitebark pine in the Greater Yellowstone Ecosystem. Since 2004 the interagency working group has collaborated to design and implement this long-term program. The purpose of the monitoring program is to detect how rates of blister rust infection and the survival and regeneration of whitebark are changing over time.

The fifth year of implementing the Whitebark Pine monitoring protocol was done in collaboration with and funding from the Greater Yellowstone Network, Greater Yellowstone Coordinating Committee and the USGS Grizzly Bear Study Team. Before commencing field work, the Whitebark Pine Monitoring Working Group decided upon a 4-year rotating panel with each panel based on a random section of whitebark pine stands representative of the GYE population. Although the revisit schedule is sufficient to establish trends in white pine blister rust, with help from the USGS, we doubled our field efforts in 2008 to document whitebark pine mortality due in part to the current widespread outbreak of mountain pine beetle. Two different 2-person crews (one USGS and one NPS GRYN) plus an ecologist from Grand Teton NP inspected over two-thousand permanently marked trees on 90 transect the proportion of trees with blister rust infection, to document the presence of mountain pine beetle and to determine the number of trees within the permanently monumented transects that have recently died.

### **Project Results:**

Data analysis and will take place this winter in preparation for the annual report which will be published USGS Grizzly Bear Study Team annual report. A final completion report will be submitted on or before 07/31/09. In addition to the field work described above the following was accomplished in 2008:

- The 2007 Annual Report was completed and published in cooperation with the Interagency Grizzly Bear Study Team and is available at:  
[www.greateryellowstonescience.org/topic/whitebarkpine/wbp\\_annualreports.html](http://www.greateryellowstonescience.org/topic/whitebarkpine/wbp_annualreports.html).
- Meta-data from the GYE Interagency Whitebark Pine Monitoring Project was provided to the Whitebark and Limber Pine Information System (WLIS) database managed and distributed by the USFS Forest Health Protection program.
- A poster showing the results of monitoring was presented at the National Forest Health Annual Meeting in San Antonio, Texas in February 2008.
- Cathie Jean (GRYN) presented the status of Whitebark pine blister rust to the Whitebark Pine Foundation at the 2008 annual meeting at Grand Targhee, ID.
- The working group and the GYCC whitebark subcommittee worked together to coordinate and acquire training and accuracy assessment data for a Forest Service Remote Sensing Applications Center aimed at assessing change in whitebark pine across the GYA. A field training class was held in June 2008 in Gardiner MT. Nancy Sturdevant from the USFS Forest Health Protection Program in Missoula, MT conducted the forest insect and disease portion of the training.
- A protocol revision was drafted to address trees that have grown since first visit and have now reached minimum size for inclusion as a permanently tagged tree within the transect; measurements of cone scars; and measures of mountain pine beetle.

### **References and WEB links for protocols, publications and reports finalized in 2008 include:**

Greater Yellowstone Whitebark Pine Monitoring Working Group. 2008. Monitoring Whitebark Pine in the Greater Yellowstone Ecosystem: 2007 Annual Report. Pages 50-56 in C.C. Schwartz, M.A. Haroldson, and K. West, editors. Yellowstone grizzly bear investigations: annual report of the Interagency Grizzly Bear Study Team, 2007. U.S. Geological Survey, Bozeman, Montana, USA.  
[http://www.greateryellowstonescience.org/topics/biological/vegetation/whitebark\\_pine/projects/healthmonitoring/reports](http://www.greateryellowstonescience.org/topics/biological/vegetation/whitebark_pine/projects/healthmonitoring/reports)

DeNitto, G., J. Canfield, C. Jean, R. Bennetts, D.P. Reinhart, E.K. Shanahan, C.C. Schwartz, and S. Cherry. 2008. Whitebark Pine Monitoring in the Greater Yellowstone Ecosystem. Poster presented at the National Forest Health Annual Meeting in San Antonio, Texas, February 2008.  
<http://fhm.fs.fed.us/posters/posters08/posters08.shtm>.